

2010 Publications

**National Marine Mammal Laboratory
Alaska Fisheries Science Center
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115**

B. M. ALLEN and R. P. ANGLISS. 2010. *Alaska Marine Mammal Stock Assessments, 2009*. Seattle, WA: U.S. Department of Commerce. (NOAA Technical Memorandum NMFS-AFSC-206) 276p. URL: <http://www.nmfs.noaa.gov/pr/pdfs/sars/ak2009.pdf>

ARTUKHIN, Yu.B., V. N. BURKANOV, and V.S. NIKULIN. 2010. *Accidental by-Catch of Marine Birds and Mammals in the Salmon Gill Net Fishery in the Northwestern Pacific Ocean*. Moscow: Skoros'Tsveta. URL: <http://www.knigakamchatka.ru/pdf/artukhin-birds-mammals.pdf>

BERGFELT, D. R., B. G. STEINETZ, J. L. DUNN, S. ATKINSON, J. W. TESTA, and G. P. ADAMS. 2010. Validation of a homologous canine relaxin radioimmunoassay and application with pregnant and non-pregnant northern fur seals (*Callorhinus ursinus*). *General and Comparative Endocrinology* 165:19-24.

BOWMAN, J., J. C. RAY, A. J. MAGOUN, D. S. JOHNSON, and F. N. DAWSON. 2010. Roads, logging, and the large-mammal community of an eastern Canadian boreal forest. *Canadian Journal of Zoology* 88(5): 454-467.

BUCKLAND, S. T., J. L. LAAKE, and D. L. BORCHERS. 2010. Double-observer line transect methods: levels of independence. *Biometrics* 66:169-177.

CAMERON, M.F., J.L. BENGTSON, P.L. BOVENG, J.K. JANSEN, B.P. KELLY, S.P. DAHLE, E.A. LOGERWELL, J.E. OVERLAND, C.L. SABINE, G.T. WARING, and J.M. WILDER. 2010. *Status Review of the Bearded Seal (*Ergnathus Barbatus*)*. Seattle, WA: U.S. Department of Commerce. (NOAA Technical Memorandum NMFS-AFCC-211) 246p. URL: <http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-211.pdf>

CARROLL, C., D. S. JOHNSON, J. R. DUNK, and W. J. ZIELINSKI. 2010. Hierarchical Bayesian Spatial Models for Multispecies Conservation Planning and Monitoring. *Conservation Biology* 24(6): 1538-1548.

DAHLHEIM, M.E. and P.A. WHITE. 2010. Ecological aspects of transient killer whales *Orcinus orca* as predators in southeastern Alaska. *Wildlife Biology* 16: 308-322.

DICKERSON, B. R., R. R. REAM, S. N. VIGNIERI, and P. BENTZEN. 2010. Population structure as revealed by MtDNA and microsatellites in northern fur seals, *Callorhinus ursinus*, throughout their range. *PLoS One* 5(5): 1-9. URL: <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0010671>

DURBAN, J., D. ELLIFRIT, M. DAHLHEIM, J. WAITE, C. MATKIN, L. BARRETT-LENNARD, G. ELLIS, R. PITMAN, R. LEDUC, and P. WADE. 2010. Photographic mark-recapture analysis of clustered mammal-eating killer whales around the Aleutian Islands and Gulf of Alaska. *Marine Biology* 157(7): 1591-1604.

EBERHARDT, L. L. and J. M. BREIWICK. 2010. Trend of the Yellowstone grizzly bear

population. *International Journal of Ecology* 2010: 1-5. URL:
<http://downloads.hindawi.com/journals/ijeco/2010/924197.pdf>

ELFES, C.T., G.R. VANBLARICOM, D. BOYD, J. CALAMBOKIDIS, P.J. CLAPHAM, R.W. PEARCE, J. ROBBINS, J.C. SALINAS, J.M. STRALEY, P.R. WADE, and M.M. KRAHN. 2010. Geographic variation of contaminant levels in humpback whale (*Megaptera novaeangliae*) feeding areas of the North Pacific and North Atlantic. *Environmental Toxicology and Chemistry* 29(4): 824-834.

ETNIER, M.A. and C.W. FOWLER. 2010. Size selectivity in marine mammal diets as a guide to evolutionarily enlightened fisheries management. *North American Journal of Fisheries Management* 30:588-603.

GARDNER, C. L., J. P. LAWLER, J. M. VER HOEF, A. J. MAGOUN, and K. A. KELLIE. 2010. Coarse-scale distribution surveys and occurrence probability modeling for wolverine in interior Alaska. *Journal of Wildlife Management* 74(8): 1894-1903.

GARRETA, V., P. MONESTIEZ, and J. M. Ver HOEF. 2010. Spatial modelling and prediction on river networks: up model, down model or hybrid? *Environmetrics* 21(5): 439-456.

GARRIGUE, C., A. N. ZERBINI, Y. GEYER, M. P. HEIDE-JØRGENSEN, W. HANAOKA, P. CLAPHAM. 2010. Movements of satellite-monitored humpback whales from New Caledonia. *Journal of Mammalogy* 91:109-115.

GELATT, T. S., C. S. DAVIS, I. STIRLING, D. B. SINIFF, C. STROBECK, and I. DELISLE. 2010. History and fate of a small isolated population of Weddell seals at White Island, Antarctica. *Conservation Genetics* 11(3): 721-735.

HAUSER, N., A. N. ZERBINI, Y. GEYER, M.-P. HEIDE-JØRGENSEN, P. CLAPHAM. 2010. Movements of satellite-monitored humpback whales, *Megaptera novaeangliae*, from the Cook Islands. *Marine Mammal Science* 26(3):679-685.

HOBBS, R. C. and J. M. WAITE. 2010. Abundance of harbor porpoise (*Phocoena phocoena*) in three Alaskan regions, corrected for observer errors due to perception bias and species misidentification, and corrected for animals submerged from view. *Fishery Bulletin* 108(3): 251-267. URL: <http://fishbull.noaa.gov/1083/hobbs.pdf>

HUBER, H. R., S. J. JEFFRIES, D. M. LAMBOURN, and B. R. DICKERSON. 2010. Population substructure of harbor seals (*Phoca vitulina richardsi*) in Washington State using mtDNA. *Canadian Journal of Zoology* 88(3): 280-288.

HUNT, G.L.Jr., B.M. ALLEN, R.P. ANGLISS, T. BAKER, N. BOND, G. BUCK, G.V. BYRD, K.O. COYLE, A. DEVOL, D.M. EGGERS, L. EISNER, R. FEELY, S. FITZGERALD, L.W. FRITZ, E.V. GRITSAY, C. LADD, W. LEWIS, J. MATHIS, C.W. MORDY, F. MUETER, J. NAPP, E. SHERR, D. SHULL, P. STABENO, M.A. STEPANENKO, S. STROM, and T.E. WHITLEDGE. 2010. Status and trends of the Bering Sea region, 2003-2008, pp. 196-267 In: S.M. McKinnell and M.J. Dagg, editors, *Marine Ecosystems of the North Pacific Ocean 2003-2008*. Vancouver, BC, Canada, North Pacific Marine Science Organization (PICES). (PICES Special Publication 4) URL:

http://www.pices.int/publications/special_publications/NPESR/2010/PICES_PUB4_Chp5_Bering%20Sea.pdf

ISONO, T., V. N. BURKANOV, N. UEDA, K. HATTORI, and O. YAMAMURA. 2010.

Resightings of branded Steller sea lions at wintering haul-out sites in Hokkaido, Japan 2003-2006. *Marine Mammal Science* 26(3):698-706.

IVASHCHENKO, Y. and P. CLAPHAM .2010. Bowhead whales *Balaena mysticetus* in the Okhotsk Sea. *Mammal Review* 40(1): 65-89.

JANSEN, J. K., P. L. BOVENG, S. P. DAHLE, and J. L. BENGTSON. 2010. Reaction of harbor seals to cruise ships. *Journal of Wildlife Management* 74(6): 1186-1194.

JOHNSON, D. S., J. L. LAAKE, and J. M. VER HOEF. 2010. A model-based approach for making ecological inference from Distance sampling data. *Biometrics* 66: 310-318.

JORGENSEN, J. C., J. M. VER HOEF, and M. T. JORGENSEN. 2010. Long-term recovery patterns of Arctic tundra after winter seismic exploration. *Ecological Applications* 20:205-221.

KELLY, B., A. WHITELEY, and D. TALLMON .2010. The Arctic melting pot. *Nature* 468(7326): 891.

KELLY, B. P., O. H. BADAJOS, M. KUNNASRANTA, J. R. MORAN, M. MARTINEZ-BAKKER, D. WARTZOK, and P. BOVENG. 2010. Seasonal home ranges and fidelity to breeding sites among ringed seals. *Polar Biology* 33(8): 1095-1109.

KELLY, B.P., J.L. BENGTSON, P.L.BOVENG, M.F. CAMERON, S.P. DAHLE. J.K. JANSEN, E.A. LOGERWELL, J.E. OVERLAND, C.L. SABINE, G.T. WARINE, and J.M. WILDER. 2010. *Status Review of the Ringed Seal (*Phoca hispida*)*. Seattle, WA: U.S. Department of Commerce. (NOAA Technical Memorandum NMFS-AFSC-212) 250p. URL:
<http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-212.pdf>

KUHN, C.E., Y. TREMBLAY, R.R. REAM, and T.S. GELATT. 2010. Coupling GPS tracking with dive behavior to examine the relationship between foraging strategy and fine-scale movements of northern fur seals. *Endangered Species Research* 12: 125-139. URL:
<http://www.int-res.com/articles/esr2010/12/n012p125.pdf>

LANDER, M. E., T. R. LOUGHIN, M. G. LOGSDON, G. R. VanBLARICOM, and B. S. FADELY. 2010. Foraging effort of juvenile Steller sea lions *Eumetopias jubatus* with respect to heterogeneity of sea surface temperature. *Endangered Species Research* 10: 145-158. URL: <http://www.int-res.com/articles/esr2010/10/n010p145.pdf>

LEA, M. A., D. JOHNSON, S. MELIN, R. REAM, and T. GELATT. 2010. Diving ontogeny and lunar responses in a highly migratory mammal, the northern fur seal *Callorhinus ursinus*. *Marine Ecology Progress Series* 419: 233-247.

MOCKLIN, J. A., D. J. RUGH, W. R. KOSKI, and N. LAWRENCE-SLAVAS. 2010. Comparison of land-based vs. floating calibration targets used in aerial photogrammetric measurements of whale lengths. *Marine Mammal Science* 26(4): 969-976.

MONTGOMERY, R. A., G. J. ROLOFF, J. M. VER HOEF, and J. J. MILLSPAUGH. 2010. Can we accurately characterize wildlife resource use when telemetry data are imprecise? *Journal of Wildlife Management* 74(8): 1917-1925.

MORIN, P. A., F. I. ARCHER, A. D. FOOTE, J. VILSTRUP, E. E. ALLEN, P. WADE, J. DURBAN, K. PARSONS, R. PITMAN, L. LI, P. BOUFFARD, S. C. ABEL NIELSEN, M. RASMUSSEN, E.

WILLERSLEV, M. T. P. GILBERT, and T. HARKINS. 2010. Complete mitochondrial genome phylogeographic analysis of killer whales (*Orcinus orca*) indicates multiple species. *Genome Research* 20(7):908-916.

MUNDY, P.E., D.M. ALLEN, J.L. BOLDT, N.A. BOND, S. DRESSEL, E.V. FARLEY Jr., D.H. HANSELMAN, J. HEIFETZ, R.R. HOPCROFT, M.A. JANOUT, C. LADD, R.C. LAM, P.A. LIVINGSTON, C.R. LUNSFORD, J.T. MATHIS, F.J. MUETER, C.N. ROOPER, N. SARKAR, S.A.K. SHOTWELL, M.V. STURDEVANT, A.C. THOMAS, T.J. WEINGARTNER, and D. WOODBY. 2010. Status and trends of the Alaska Current region 2003-2008, pp. 142-195 In: S.M. McKinnell and M.J. Dagg, editors, *Marine Ecosystems of the North Pacific Ocean 2003-2008*. Vancouver, BC, Canada, North Pacific Marine Science Organization (PICES). (PICES Special Publication 4) 393p. URL:
http://www.pices.int/publications/special_publications/NPESR/2010/PICES_PUB4_Chp4_Alaska.pdf

OLESON, E.M., C.H. BOGGS, K.A. FORNEY, M.B. HANSON, D.R. KOBAYASHI, B.L. TAYLOR, P.R. WADE, and G.M. YLITALO. 2010. *Status review of Hawaiian insular false killer whales (Pseudorca crassidens) under the Endangered Species Act*. Honolulu, HI: U.S. Department of Commerce. (NOAA Technical Memorandum NMFS-PIFSC-22) 140p. plus appendices. URL:
http://www.pifsc.noaa.gov/tech/NOAA_Tech_Memo_PIFSC_22.pdf

OREMLAND, M.S., B.M. ALLEN, P.J. CLAPHAM, M.J. MOORE, C. POTTER, AND J.G. MEAD. 2010. Mandibular fractures in short-finned pilot whales, *Globicephala macrorhynchus*. *Marine Mammal Science* 26(1): 1-16.

PASTENE, L. A., J. ACEVEDO, M. GOTO, A. N. ZERBINI, P. ACUNA, and A. AGUAYO-LOBO. 2010. Population structure and possible migratory links of common minke whales, *Balaenoptera acutorostrata*, in the Southern Hemisphere. *Conservation Genetics* 11(4): 1553-1558.

PETERSON, E. E. and J. M. VER HOEF. 2010. A mixed-model moving-average approach to geostatistical modeling in stream networks. *Ecology* 91(3): 644-651.

PILOT, M., M. E. DAHLHEIM, and A. R. HOELZEL. 2010. Social cohesion among kin, gene flow without dispersal and the evolution of population genetic structure in the killer whale (*Orcinus orca*). *Journal of Evolutionary Biology* 23:20-31.

PINSKY, M. L., S. D. NEWSOME, B. R. DICKERSON, Y. FANG, M. VAN TUINEN, D. J. KENNEDY, R. R. REAM, and E. A. HADLY. 2010 . Dispersal provided resilience to range collapse in a marine mammal: Insights from the past to inform conservation biology. *Molecular Ecology* 19(12): 2418-2429 .

PUNT, A.E. and P. R. WADE. 2010. *Population Status of the Eastern North Pacific Stock of Gray Whales in 2009*. Seattle, WA: U.S. Department of Commerce. (NOAA Technical Memorandum NMFS-AFSC-207) 43p. URL:
<http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-207.pdf>

RICHARD, P. R., J. L. LAAKE, R. C. HOBBS, M. P. HEIDE-JØRGENSEN, N. C. ASSELIN, and H. CLEATOR. 2010. Baffin Bay narwhal population distribution and numbers: aerial surveys in the Canadian high Arctic, 2002-04. *Arctic* 63(1): 85-99.

RONE, B.K., A.B. DOUGLAS, A.N. ZERBINI, L. MORSE, A. MARTINEZ, P. J. CLAPHAM, and J. CALAMBOKIDIS. 2010. *Results From the April 2009 Gulf of Alaska Line Transect Survey*

(GOALS) in the Navy Training Exercise Area. Seattle, WA: U.S. Department of Commerce . (NOAA Technical Memorandum NMFS-AFSC-209) 39p. URL:
<http://www.afsc.noaa.gov/Publications/AFSC-TM/NOAA-TM-AFSC-209.pdf>

RUGH, D. J., K. E. W. SHELDEN, and R. C. HOBBS. 2010. Range contraction in a beluga whale population. *Endangered Species Research* 12(1): 69-75. URL:
<http://www.int-res.com/articles/esr2010/12/n012p069.pdf>

SCHMIDT, J. H., J. A. WALKER, M. S. LINDBERG, D. S. JOHNSON, and S. E. STEPHENS. 2010. A general Bayesian hierarchical model for estimating survival of nests and young. *Auk* 127(2): 379-386.

SCHWEDER, T., D. SADYKOVA, D. RUGH, and W. KOSKI. 2010. Population estimates from aerial photographic surveys of naturally and variably marked bowhead whales. *Journal of Agricultural, Biological, and Environmental Statistics* 15:1-19.

SHELDEN, K.E.W. and D.J. RUGH .2010. Forty years of winter: cetaceans observed during the southbound migration of gray whales, *Eschrichtius robustus*, near Granite Canyon, central California. *Marine Fisheries Review* 72(4): 1-19. URL:
<http://spo.nmfs.noaa.gov/mfr724/mfr7241.pdf>

SHPAK, O. V., R. D. ANDREWS, D. M. GLAZOV, D. I. LITOVKA, R. C. HOBBS, and L. M. MUKHAMETOV. 2010. Seasonal migrations of Sea of Okhotsk beluga whales (*Delphinapterus leucas*) of the Sakhalin-Amur summer aggregation. *Russian Journal of Marine Biology* 36(1): 56-62.

SPRAKER, T. R. and M. E. LANDER. 2010. Causes of mortality in northern fur seals (*Callorhinus ursinus*), St. Paul Island, Pribilof Islands, Alaska, 1986-2006. *Journal of Wildlife Diseases* 46(2): 450-473.

TESTA, J. W., G. P. ADAMS, D. R. BERGFELT, D. S. JOHNSON, R. R. REAM, and T. S. GELATT. 2010. Replicating necropsy data without lethal collections: using ultrasonography to understand the decline in northern fur seals. *Journal of Applied Ecology* 47(6): 1199-1206.

THOMAS, L., S.T. BUCKLAND, E. A. REXSTAD, J. L. LAAKE, S. STRINDBERG, S. L. HEDLEY, J. R. B. BISHOP, T. A. MARQUES, and K. P. BURNHAM. 2010. Distance software: design and analysis of Distance sampling surveys for estimating population size. *Journal of Applied Ecology* 47:5-14.

Ver HOEF, J. M. and E. E. PETERSON. 2010. A moving average approach for spatial statistical models of stream networks. *Journal of the American Statistical Association* 105(489): 6-18. URL: <http://pubs.amstat.org/doi/pdf/10.1198/jasa.2009.ap08248>

Ver HOEF, J. M. and E. E. PETERSON. 2010. Statistical dependence in stream networks -- rejoinder. *Journal of the American Statistical Association* 105(489): 22-24. URL:
<http://pubs.amstat.org/doi/pdf/10.1198/jasa.2009.ap08615>

Ver HOEF, J. M., J. M. LONDON, and P. L. BOVENG. 2010. Fast computing of some generalized linear mixed pseudo-models with temporal autocorrelation. *Computational Statistics* 25:39-55.

ZEPPELIN, T. K. and A. J. ORR. 2010. Stable isotope and scat analyses indicate diet and

habitat partitioning in northern fur seals *Callorhinus ursinus* across the eastern Pacific. *Marine Ecology-Progress Series* 409: 241-253. URL:
<http://www.int-res.com/articles/meps2010/409/m409p241.pdf>

ZERBINI, A. N., P. J. CLAPHAM, and P. R. WADE. 2010. Assessing plausible rates of population growth in humpback whales from life-history data. *Marine Biology* 157(6): 1225-1236.